09/833,041

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NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2		"Ask CAS" for self-help around the clock
NEWS 3	Feb 24	PCTGEN now available on STN
NEWS 4	Feb 24	TEMA now available on STN
NEWS 5	Feb 26	NTIS now allows simultaneous left and right truncation
NEWS 6	Feb 26	PCTFULL now contains images
NEWS 7	Mar 04	SDI PACKAGE for monthly delivery of multifile SDI results
NEWS 8	Mar 24	PATDPAFULL now available on STN
NEWS 9	Mar 24	Additional information for trade-named substances without structures available in REGISTRY
NEWS 10	Apr 11	Display formats in DGENE enhanced
NEWS 11	Apr 14	MEDLINE Reload
NEWS 12	Apr 17	Polymer searching in REGISTRY enhanced
NEWS 13	Jun 13	Indexing from 1947 to 1956 added to records in CA/CAPLUS
NEWS 14	Apr 21	New current-awareness alert (SDI) frequency in WPIDS/WPINDEX/WPIX
NEWS 15	Apr 28	RDISCLOSURE now available on STN
NEWS 16	May 05	Pharmacokinetic information and systematic chemical names added to PHAR
NEWS 17	May 15	MEDLINE file segment of TOXCENTER reloaded
NEWS 18	May 15	Supporter information for ENCOMPPAT and ENCOMPLIT updated
NEWS 19	May 19	Simultaneous left and right truncation added to WSCA
NEWS 20	May 19	RAPRA enhanced with new search field, simultaneous left and right truncation
NEWS 21	Jun 06	Simultaneous left and right truncation added to CBNB
NEWS 22	Jun 06	PASCAL enhanced with additional data
NEWS 23	Jun 20	2003 edition of the FSTA Thesaurus is now available
NEWS 24	Jun 25	HSDB has been reloaded
NEWS 25	Jul 16	Data from 1960-1976 added to RDISCLOSURE
NEWS 26	Jul 21	Identification of STN records implemented
NEWS 27	Jul 21	Polymer class term count added to REGISTRY
NEWS 28	Jul 22	INPADOC: Basic index (/BI) enhanced; Simultaneous Left and Right Truncation available

NEWS EXPRESS	April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS INTER	General Internet Information
NEWS LOGIN	Welcome Banner and News Items
NEWS PHONE	Direct Dial and Telecommunication Network Access to STN
NEWS WWW	CAS World Wide Web Site (general information)

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FILE 'HOME' ENTERED AT 17:28:02 ON 24 JUL 2003

=> file medline, uspatful, dgene, embase, scisearch, fsta, jicst, wpids, biosis,
hcaplus
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.21       0.21

FILE 'MEDLINE' ENTERED AT 17:28:27 ON 24 JUL 2003

FILE 'USPATFULL' ENTERED AT 17:28:27 ON 24 JUL 2003
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FILE 'WPIDS' ENTERED AT 17:28:27 ON 24 JUL 2003
COPYRIGHT (C) 2003 THOMSON DERWENT

FILE 'BIOSIS' ENTERED AT 17:28:27 ON 24 JUL 2003
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COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

=> s albumin fusion protein
L1         2651 ALBUMIN FUSION PROTEIN

=> s albumin fusion protein () increased shelf-life
L2            1 ALBUMIN FUSION PROTEIN (W) INCREASED SHELF-LIFE

=> d l2 ti abs ibib tot

L2   ANSWER 1 OF 1  USPATFULL on STN
TI     Albumin fusion proteins
AB     The present invention encompasses albumin fusion proteins. Nucleic acid
       molecules encoding the albumin fusion proteins of the invention are also
       encompassed by the invention, as are vectors containing these nucleic
       acids, host cells transformed with these nucleic acids vectors, and
       methods of making the albumin fusion proteins of the invention and using
       these nucleic acids, vectors, and/or host cells. Additionally the
       present invention encompasses pharmaceutical compositions comprising
       albumin fusion proteins and methods of treating, preventing, or
       ameliorating diseases, disordrs or conditions using albumin fusion
```

proteins of the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2003:181414 USPATFULL		
TITLE:	Albumin fusion proteins		
INVENTOR(S):	Rosen, Craig A., Laytonsville, MD, UNITED STATES Haseltine, William A., Washington, DC, UNITED STATES		
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003125247	A1	20030703
APPLICATION INFO.:	US 2001-833041	A1	20010412 (9)
	NUMBER		DATE
PRIORITY INFORMATION:	US 2000-256931P		20001221 (60)
	US 2000-199384P		20000425 (60)
	US 2000-229358P		20000412 (60)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850		
NUMBER OF CLAIMS:	29		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	20 Drawing Page(s)		
LINE COUNT:	15235		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d his

(FILE 'HOME' ENTERED AT 17:28:02 ON 24 JUL 2003)

FILE 'MEDLINE, USPATFULL, DGENE, EMBASE, SCISEARCH, FSTA, JICST-EPLUS, WPIDS, BIOSIS, HCAPLUS' ENTERED AT 17:28:27 ON 24 JUL 2003

L1 2651 S ALBUMIN FUSION PROTEIN
L2 1 S ALBUMIN FUSION PROTEIN () INCREASED SHELF-LIFE

=> s l1 and extended shelf-life
L3 188 L1 AND EXTENDED SHELF-LIFE

=> s l1 and increase half-life
L4 1 L1 AND INCREASE HALF-LIFE

=> d l4 ti abs ibib tot

L4 ANSWER 1 OF 1 USPATFULL on STN
TI Tumor necrosis factor receptors 6alpha & 6beta
AB The present invention relates to novel Tumor Necrosis Factor Receptor proteins. In particular, isolated nucleic acid molecules are provided encoding the human TNFR-6.alpha. & -6.beta. proteins. TNFR-6.alpha. & -6.beta. polypeptides are also provided as are vectors, host cells and recombinant methods for producing the same. The invention further relates to screening methods for identifying agonists and antagonists of TNFR-6.alpha. & -6.beta. activity. Also provided are diagnostic methods for detecting immune system-related disorders and therapeutic methods for treating immune system-related disorders.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2002:272468 USPATFULL
TITLE:	Tumor necrosis factor receptors 6alpha & 6beta
INVENTOR(S):	Gentz, Reiner L., Rockville, MD, UNITED STATES Ebner, Reinhard, Gaithersburg, MD, UNITED STATES Yu, Guo-Liang, Berkeley, CA, UNITED STATES

	Ruben, Steven M., Olney, MD, UNITED STATES Ni, Jian, Germantown, MD, UNITED STATES Feng, Ping, Gaithersburg, MD, UNITED STATES
PATENT ASSIGNEE(S):	Human Genome Sciences, Inc., Rockville, MD, UNITED STATES, 20850 (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002150583	A1	20021017
APPLICATION INFO.:	US 2001-935727	A1	20010824 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1998-6352, filed on 13 Jan 1998, PENDING Continuation-in-part of Ser. No. US 2000-518931, filed on 3 Mar 2000, PENDING Continuation-in-part of Ser. No. US 1998-6352, filed on 13 Jan 1998, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-303224P	20010706 (60)
	US 2000-252131P	20001121 (60)
	US 2000-227598P	20000825 (60)
	US 1999-168235P	19991201 (60)
	US 1999-146371P	19990802 (60)
	US 1999-131964P	19990430 (60)
	US 1999-131270P	19990427 (60)
	US 1999-124092P	19990312 (60)
	US 1999-121774P	19990304 (60)
	US 1997-35496P	19970114 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
NUMBER OF CLAIMS: 48
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 23 Drawing Page(s)
LINE COUNT: 12989
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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=> dhis
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     (FILE 'HOME' ENTERED AT 17:28:02 ON 24 JUL 2003)

     FILE 'MEDLINE, USPATFULL, DGENE, EMBASE, SCISEARCH, FSTA, JICST-EPLUS,
     WPIDS, BIOSIS, HCAPLUS' ENTERED AT 17:28:27 ON 24 JUL 2003
L1          2651 S ALBUMIN FUSION PROTEIN
L2             1 S ALBUMIN FUSION PROTEIN () INCREASED SHELF-LIFE
L3           188 S L1 AND EXTENDED SHELF-LIFE
L4             1 S L1 AND INCREASE HALF-LIFE

=> s l3 and increase albumin activity
L5             0 L3 AND INCREASE ALBUMIN ACTIVITY

=> s l3 and non-glycosylation
L6             0 L3 AND NON-GLYCOSYLATION

=> s l3 and yeast cell
L7             1 L3 AND YEAST CELL
```

```
=> d l7 ti abs ibib tot

L7   ANSWER 1 OF 1  USPATFULL on STN
TI     Albumin fusion proteins
AB     The present invention encompasses albumin fusion proteins. Nucleic acid
       molecules encoding the albumin fusion proteins of the invention are also
       encompassed by the invention, as are vectors containing these nucleic
       acids, host cells transformed with these nucleic acids vectors, and
       methods of making the albumin fusion proteins of the invention and using
       these nucleic acids, vectors, and/or host cells. Additionally the
       present invention encompasses pharmaceutical compositions comprising
       albumin fusion proteins and methods of treating, preventing, or
       ameliorating diseases, disordrs or conditions using albumin fusion
       proteins of the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER:         2003:181414  USPATFULL
TITLE:                    Albumin fusion proteins
INVENTOR(S):              Rosen, Craig A., Laytonsville, MD, UNITED STATES
                          Haseltine, William A., Washington, DC, UNITED STATES

                               NUMBER        KIND    DATE
                          ---------------- ------ --------
PATENT INFORMATION:       US 2003125247      A1   20030703
APPLICATION INFO.:        US 2001-833041     A1   20010412  (9)

                                 NUMBER         DATE
                          ------------------ --------
PRIORITY INFORMATION:     US 2000-256931P    20001221 (60)
                          US 2000-199384P    20000425 (60)
                          US 2000-229358P    20000412 (60)
DOCUMENT TYPE:            Utility
FILE SEGMENT:             APPLICATION
LEGAL REPRESENTATIVE:     HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE,
                          ROCKVILLE, MD, 20850
NUMBER OF CLAIMS:         29
EXEMPLARY CLAIM:          1
NUMBER OF DRAWINGS:       20 Drawing Page(s)
LINE COUNT:               15235
CAS INDEXING IS AVAILABLE FOR THIS PATENT.


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     (FILE 'HOME' ENTERED AT 17:28:02 ON 24 JUL 2003)

     FILE 'MEDLINE, USPATFULL, DGENE, EMBASE, SCISEARCH, FSTA, JICST-EPLUS,
     WPIDS, BIOSIS, HCAPLUS' ENTERED AT 17:28:27 ON 24 JUL 2003
L1          2651 S ALBUMIN FUSION PROTEIN
L2             1 S ALBUMIN FUSION PROTEIN () INCREASED SHELF-LIFE
L3           188 S L1 AND EXTENDED SHELF-LIFE
L4             1 S L1 AND INCREASE HALF-LIFE
L5             0 S L3 AND INCREASE ALBUMIN ACTIVITY
L6             0 S L3 AND NON-GLYCOSYLATION
L7             1 S L3 AND YEAST CELL

=> s l3 and protease deficient
L8             2 L3 AND PROTEASE DEFICIENT

=> d l8 ti abs ibib tot

L8   ANSWER 1 OF 2  USPATFULL on STN
TI     Albumin fusion proteins
```

AB The present invention encompasses albumin fusion proteins. Nucleic acid molecules encoding the albumin fusion proteins of the invention are also encompassed by the invention, as are vectors containing these nucleic acids, host cells transformed with these nucleic acids vectors, and methods of making the albumin fusion proteins of the invention and using these nucleic acids, vectors, and/or host cells. Additionally the present invention encompasses pharmaceutical compositions comprising albumin fusion proteins and methods of treating, preventing, or ameliorating diseases, disordrs or conditions using albumin fusion proteins of the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2003:181414 USPATFULL		
TITLE:	Albumin fusion proteins		
INVENTOR(S):	Rosen, Craig A., Laytonsville, MD, UNITED STATES Haseltine, William A., Washington, DC, UNITED STATES		

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003125247	A1	20030703	
APPLICATION INFO.:	US 2001-833041	A1	20010412	(9)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2000-256931P	20001221	(60)
	US 2000-199384P	20000425	(60)
	US 2000-229358P	20000412	(60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
NUMBER OF CLAIMS:	29
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	20 Drawing Page(s)
LINE COUNT:	15235

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 2 OF 2 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

TI New albumin fusion proteins with **extended shelf life**, useful for treating leukemia, warts, hepatitis, multiple sclerosis and AIDS, comprises therapeutic protein fused to albumin.

AN 2002-179329 [23] WPIDS

CR 2001-602931 [68]

AB WO 200179271 A UPAB: 20030211

NOVELTY - An **albumin fusion protein** (I) comprising:

(a) a therapeutic protein (X) and albumin (A) containing a fully defined sequence (S1) of 585 amino acids as given in the specification;

(b) X and a fragment or variants of S1, where the fragment or variants has albumin activity; or

(c) a fragment or variant of X and A, where the fragment or variant has a biological activity of X, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) an **albumin fusion protein** (II) comprising a peptide inserted into A comprising amino acids 54-61, 76-89, 92-100, 170-176, 247-252, 266-277, 280-288, 362-368, 439-447, 462-475, 478-486 or 560-566 of S1;

(2) an **albumin fusion protein** (III) comprising a single chain antibody or its portion and A or its fragment or variant;

(3) a composition comprising any of (I)-(III) and a pharmaceutically active carrier;

(4) a kit comprising the composition;

(5) treating a disease or disorder that is modulated by X in a patient comprising administering any of (I)-(III);

(6) extending the shelf life of X comprising fusing X or its fragment or variant to A or its fragment or variant, sufficient to extend the shelf-life of X compared to the shelf life of X in an unfused state;

(7) a nucleic acid molecule (IV) comprising a polynucleotide sequence encoding any of (I)-(III);

(8) a vector comprising (IV); and

(9) a host cell comprising (IV).

ACTIVITY - Cytostatic; dermatological; virucide; anti-HIV; neuroprotective; hepatotropic; antiinflammatory. Tests are described but no results are given in the source material.

MECHANISM OF ACTION - Gene therapy.

USE - The fusion protein is useful for the treatment of hairy cell leukemia, Kaposi's sarcoma, genital warts, anal warts, chronic hepatitis B, chronic non-A, non-B hepatitis, hepatitis C/D, chronic myelogenous leukemia, renal cell carcinoma, bladder carcinoma, ovarian carcinoma, cervical carcinoma, skin cancer, recurrent respirator papillomatosis, non-Hodgkin's lymphoma, cutaneous T-cell lymphoma, melanoma, multiple myeloma, acquired immunodeficiency syndrome (AIDS), multiple sclerosis and glioblastoma. The fusion of albumin extends the shelf life and the in vivo and in vitro biological activity of the therapeutic protein (all claimed).

ADVANTAGE - Therapeutic proteins can be stabilized to extend shelf life and/or retain the protein's activity for extended periods of time in solution, in vivo or in vitro by genetically or chemically fusing the protein to albumin or its fragment or variant. In addition the use of albumin fusion proteins reduces the need to formulate protein solutions with large excesses of carrier proteins to prevent loss of therapeutic protein due to factors such as binding to the container. The extension of shelf life was tested by measuring biological activity (Nb2 cell proliferation) of human albumin-human growth hormone (HA-hGH) fusion protein remaining after incubation in cell culture media for up to 3 weeks at 37 deg. C. At week 3 there was still approx. 95% cell proliferation compared to no activity of unfused hGH (no observed activity by week 2).

Dwg.0/18

ACCESSION NUMBER: 2002-179329 [23] WPIDS
CROSS REFERENCE: 2001-602931 [68]
DOC. NO. CPI: C2002-055553
TITLE: New albumin fusion proteins with **extended shelf life**, useful for treating leukemia, warts, hepatitis, multiple sclerosis and AIDS, comprises therapeutic protein fused to albumin.
DERWENT CLASS: B04 D16
INVENTOR(S): BALLANCE, D J; PRIOR, C P; SADEGHI, H; SLEEP, D; TURNER, A J
PATENT ASSIGNEE(S): (DELZ) DELTA BIOTECHNOLOGY LTD; (PRIN-N) PRINCIPIA PHARM CORP
COUNTRY COUNT: 96
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2001079271	A1	20011025	(200223)*	EN	294
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
AU 2001061024	A	20011030	(200225)		
EP 1278767	A1	20030129	(200310)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001079271	A1	WO 2001-US12009	20010412
AU 2001061024	A	AU 2001-61024	20010412
EP 1278767	A1	EP 2001-934875	20010412
		WO 2001-US12009	20010412

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2001061024	A	Based on	WO 200179271
EP 1278767	A1	Based on	WO 200179271

PRIORITY APPLN. INFO: US 2000-256931P 20001221; US 2000-229358P 20000412; US 2000-199384P 20000425

=> d his

(FILE 'HOME' ENTERED AT 17:28:02 ON 24 JUL 2003)

FILE 'MEDLINE, USPATFULL, DGENE, EMBASE, SCISEARCH, FSTA, JICST-EPLUS, WPIDS, BIOSIS, HCAPLUS' ENTERED AT 17:28:27 ON 24 JUL 2003

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L1          2651 S ALBUMIN FUSION PROTEIN
L2             1 S ALBUMIN FUSION PROTEIN () INCREASED SHELF-LIFE
L3           188 S L1 AND EXTENDED SHELF-LIFE
L4             1 S L1 AND INCREASE HALF-LIFE
L5             0 S L3 AND INCREASE ALBUMIN ACTIVITY
L6             0 S L3 AND NON-GLYCOSYLATION
L7             1 S L3 AND YEAST CELL
L8             2 S L3 AND PROTEASE DEFICIENT
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=> d his

(FILE 'HOME' ENTERED AT 17:28:02 ON 24 JUL 2003)

FILE 'MEDLINE, USPATFULL, DGENE, EMBASE, SCISEARCH, FSTA, JICST-EPLUS, WPIDS, BIOSIS, HCAPLUS' ENTERED AT 17:28:27 ON 24 JUL 2003

L1 2651 S ALBUMIN FUSION PROTEIN
L2 1 S ALBUMIN FUSION PROTEIN () INCREASED SHELF-LIFE
L3 188 S L1 AND EXTENDED SHELF-LIFE
L4 1 S L1 AND INCREASE HALF-LIFE
L5 0 S L3 AND INCREASE ALBUMIN ACTIVITY
L6 0 S L3 AND NON-GLYCOSYLATION
L7 1 S L3 AND YEAST CELL
L8 2 S L3 AND PROTEASE DEFICIENT

=> s l3 and kit
L9 2 L3 AND KIT

=> d l9 ti abs ibib tot

L9 ANSWER 1 OF 2 USPATFULL on STN
TI Albumin fusion proteins
AB The present invention encompasses albumin fusion proteins. Nucleic acid molecules encoding the albumin fusion proteins of the invention are also encompassed by the invention, as are vectors containing these nucleic acids, host cells transformed with these nucleic acids vectors, and methods of making the albumin fusion proteins of the invention and using these nucleic acids, vectors, and/or host cells. Additionally the present invention encompasses pharmaceutical compositions comprising

albumin fusion proteins and methods of treating, preventing, or ameliorating diseases, disordrs or conditions using albumin fusion proteins of the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2003:181414 USPATFULL		
TITLE:	Albumin fusion proteins		
INVENTOR(S):	Rosen, Craig A., Laytonsville, MD, UNITED STATES Haseltine, William A., Washington, DC, UNITED STATES		
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003125247	A1	20030703
APPLICATION INFO.:	US 2001-833041	A1	20010412 (9)
	NUMBER		DATE
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	US 2000-199384P		20000425 (60)
	US 2000-229358P		20000412 (60)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850		
NUMBER OF CLAIMS:	29		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	20 Drawing Page(s)		
LINE COUNT:	15235		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 2 OF 2 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

TI New albumin fusion proteins with **extended shelf life**, useful for treating leukemia, warts, hepatitis, multiple sclerosis and AIDS, comprises therapeutic protein fused to albumin.

AN 2002-179329 [23] WPIDS

CR 2001-602931 [68]

AB WO 200179271 A UPAB: 20030211

NOVELTY - An **albumin fusion protein** (I) comprising:

(a) a therapeutic protein (X) and albumin (A) containing a fully defined sequence (S1) of 585 amino acids as given in the specification;

(b) X and a fragment or variants of S1, where the fragment or variants has albumin activity; or

(c) a fragment or variant of X and A, where the fragment or variant has a biological activity of X, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) an **albumin fusion protein** (II) comprising a peptide inserted into A comprising amino acids 54-61, 76-89, 92-100, 170-176, 247-252, 266-277, 280-288, 362-368, 439-447, 462-475, 478-486 or 560-566 of S1;

(2) an **albumin fusion protein** (III) comprising a single chain antibody or its portion and A or its fragment or variant;

(3) a composition comprising any of (I)-(III) and a pharmaceutically active carrier;

(4) a **kit** comprising the composition;

(5) treating a disease or disorder that is modulated by X in a patient comprising administering any of (I)-(III);

(6) extending the shelf life of X comprising fusing X or its fragment or variant to A or its fragment or variant, sufficient to extend the shelf-life of X compared to the shelf life of X in an unfused state;

(7) a nucleic acid molecule (IV) comprising a polynucleotide sequence encoding any of (I)-(III);

(8) a vector comprising (IV); and
(9) a host cell comprising (IV).

ACTIVITY - Cytostatic; dermatological; virucide; anti-HIV; neuroprotective; hepatotropic; antiinflammatory. Tests are described but no results are given in the source material.

MECHANISM OF ACTION - Gene therapy.

USE - The fusion protein is useful for the treatment of hairy cell leukemia, Kaposi's sarcoma, genital warts, anal warts, chronic hepatitis B, chronic non-A, non-B hepatitis, hepatitis C/D, chronic myelogenous leukemia, renal cell carcinoma, bladder carcinoma, ovarian carcinoma, cervical carcinoma, skin cancer, recurrent respirator papillomatosis, non-Hodgkin's lymphoma, cutaneous T-cell lymphoma, melanoma, multiple myeloma, acquired immunodeficiency syndrome (AIDS), multiple sclerosis and glioblastoma. The fusion of albumin extends the shelf life and the in vivo and in vitro biological activity of the therapeutic protein (all claimed).

ADVANTAGE - Therapeutic proteins can be stabilized to extend shelf life and/or retain the protein's activity for extended periods of time in solution, in vivo or in vitro by genetically or chemically fusing the protein to albumin or its fragment or variant. In addition the use of albumin fusion proteins reduces the need to formulate protein solutions with large excesses of carrier proteins to prevent loss of therapeutic protein due to factors such as binding to the container. The extension of shelf life was tested by measuring biological activity (Nb2 cell proliferation) of human albumin-human growth hormone (HA-hGH) fusion protein remaining after incubation in cell culture media for up to 3 weeks at 37 deg. C. At week 3 there was still approx. 95% cell proliferation compared to no activity of unfused hGH (no observed activity by week 2).

Dwg.0/18

ACCESSION NUMBER: 2002-179329 [23] WPIDS
CROSS REFERENCE: 2001-602931 [68]
DOC. NO. CPI: C2002-055553
TITLE: New albumin fusion proteins with **extended shelf life**, useful for treating leukemia, warts, hepatitis, multiple sclerosis and AIDS, comprises therapeutic protein fused to albumin.
DERWENT CLASS: B04 D16
INVENTOR(S): BALLANCE, D J; PRIOR, C P; SADEGHI, H; SLEEP, D; TURNER, A J
PATENT ASSIGNEE(S): (DELZ) DELTA BIOTECHNOLOGY LTD; (PRIN-N) PRINCIPIA PHARM CORP
COUNTRY COUNT: 96
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2001079271	A1	20011025	(200223)*	EN	294
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
AU 2001061024	A	20011030	(200225)		
EP 1278767	A1	20030129	(200310)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001079271	A1	WO 2001-US12009	20010412
AU 2001061024	A	AU 2001-61024	20010412
EP 1278767	A1	EP 2001-934875	20010412

WO 2001-US12009 20010412

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2001061024	A	Based on	WO 200179271
EP 1278767	A1	Based on	WO 200179271

PRIORITY APPLN. INFO: US 2000-256931P 20001221; US 2000-229358P 20000412; US 2000-199384P 20000425

```
=> e rosen, c/au
E1            7     ROSEN ZVI M/AU
E2            7     ROSEN ZVI MICHAL/AU
E3            0 --> ROSEN, C/AU
E4            1     ROSENA BRUCE R/AU
E5            1     ROSENABUM S/AU
E6            1     ROSENACKER A F/AU
E7            1     ROSENACKER ARTHUR F/AU
E8            4     ROSENADA CEPERO R/AU
E9            1     ROSENAGER L/AU
E10           2     ROSENAK B/AU
E11          71     ROSENAK B D/AU
E12           9     ROSENAK BERNARD D/AU

=> e haseltine,W/au
E1            1     HASELTINE WILLIAM G/AU
E2            1     HASELTINE WILLIAM GAGE/AU
E3            0 --> HASELTINE,W/AU
E4            1     HASELTLINE F P/AU
E5            8     HASELTON A/AU
E6            5     HASELTON AARON/AU
E7            1     HASELTON B J/AU
E8            4     HASELTON C/AU
E9            1     HASELTON C B/AU
E10           9     HASELTON C J/AU
E11          37     HASELTON C L/AU
E12           5     HASELTON CAROLE J/AU

=> s e1
L10           1 "HASELTINE WILLIAM G"/AU

=> s e2
L11           1 "HASELTINE WILLIAM GAGE"/AU

=> d l10 ti abs ibib tot

L10  ANSWER 1 OF 1  HCAPLUS  COPYRIGHT 2003 ACS on STN
TI   Physicochemical properties of mono- and diisocyanates
AB   Liq. d., viscosity, sp. heat, and vapor pressure data are reported for a
     new class of mono- and diisocyanates.
ACCESSION NUMBER:         1986:540063  HCAPLUS
DOCUMENT NUMBER:          105:140063
TITLE:                    Physicochemical properties of mono- and diisocyanates
AUTHOR(S):                Achorn, Peter J.; Haseltine, William G.;
                          Miller, J. K.
CORPORATE SOURCE:         Chem. Res. Div., Am. Cyanamid Co., Stamford, CT,
                          06904-0060, USA
SOURCE:                   Journal of Chemical and Engineering Data (1986),
                          31(4), 385-7
                          CODEN: JCEAAX; ISSN: 0021-9568
DOCUMENT TYPE:            Journal
```

LANGUAGE: English

=> d l11 ti abs ibib tot

L11 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2003 ACS on STN
TI High pressure carbon-13 nuclear magnetic resonance relaxation study of 2-n-butyl-3-n-hexylnaphthalene
AB Unavailable
ACCESSION NUMBER: 1981:559261 HCAPLUS
DOCUMENT NUMBER: 95:159261
TITLE: High pressure carbon-13 nuclear magnetic resonance relaxation study of 2-n-butyl-3-n-hexylnaphthalene
AUTHOR(S): **Haseltine, William Gage**
CORPORATE SOURCE: Pennsylvania State Univ., University Park, PA, USA
SOURCE: (1981) 195 pp. Avail.: Univ. Microfilms Int., Order No. 8112809
From: Diss. Abstr. Int. B 1981, 42(1), 230
DOCUMENT TYPE: Dissertation
LANGUAGE: English

WEST

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Search Results -

Terms	Documents
l6 and L9	119

Database: US Patents Full-Text Database; US Pre-Grant Publication Full-Text Database; JPO Abstracts Database; EPO Abstracts Database; Derwent World Patents Index; IBM Technical Disclosure Bulletins

Search: L10

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Search History

DATE: Thursday, July 24, 2003 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=USPT; PLUR=YES; OP=OR			
L10	l6 and L9	119	L10
L9	non-glycosylated and L8	1006	L9
L8	protease deficient and l6	30313	L8
L7	stable solution and L6	471777	L7
L6	storage and L5	3272	L6
L5	L3 and stability	6708	L5
L4	in vivo activity and L3	2927400	L4
L3	yeast and L2	11983	L3
L2	extended shelf-life and L1	538751	L2
L1	fusion albumin protein	189881	L1

END OF SEARCH HISTORY

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Search Results - Record(s) 1 through 10 of 119 returned.

☐ 1. Document ID: US 6593112 B1

L10: Entry 1 of 119 File: USPT Jul 15, 2003

US-PAT-NO: 6593112
DOCUMENT-IDENTIFIER: US 6593112 B1

TITLE: Polynucleotides encoding fibroblast growth factor 15

DATE-ISSUED: July 15, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Greene; John M.	Gaithersburg	MD		
Rosen; Craig A.	Laytonsville	MD		
Alderson; Ralph	Gaithersburg	MD		
Melder; Robert J.	Gaithersburg	MD		
Duan; D. Roxanne	Bethesda	MD		

US-CL-CURRENT: 435/69.4; 435/243, 435/320.1, 435/325, 435/69.7, 514/44, 530/300, 530/399, 536/23.1, 536/23.5

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw. Desc | Image

☐ 2. Document ID: US 6592865 B2

L10: Entry 2 of 119 File: USPT Jul 15, 2003

US-PAT-NO: 6592865
DOCUMENT-IDENTIFIER: US 6592865 B2

TITLE: Methods and compositions for modulating ACE-2 activity

DATE-ISSUED: July 15, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Parry; Tom J.	Walkersville	MD		
Sekut; Les	Ijamsville	MD		

US-CL-CURRENT: 514/15, 514/2

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw. Desc | Image

☐ 3. Document ID: US 6566325 B2

L10: Entry 3 of 119 File: USPT May 20, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Mason; Hugh S.	Ithaca	NY		
Thanavala; Yasmin	Williamsville	NY		
Arntzen; Charles Joel	Ithaca	NY		
Richter; Elizabeth	Ithaca	NY		

US-CL-CURRENT: 435/320.1; 435/69.3, 435/71.2, 536/23.4

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

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☐ 8. Document ID: US 6544761 B2

L10: Entry 8 of 119 File: USPT Apr 8, 2003

US-PAT-NO: 6544761
DOCUMENT-IDENTIFIER: US 6544761 B2

TITLE: Human tissue inhibitor of metalloproteinase-4

DATE-ISSUED: April 8, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Greene; John M.	Gaithersburg	MD		
Rosen; Craig A.	Laytonsville	MD		

US-CL-CURRENT: 435/69.2; 514/12, 530/350, 536/23.5

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

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☐ 9. Document ID: US 6544505 B2

L10: Entry 9 of 119 File: USPT Apr 8, 2003

US-PAT-NO: 6544505
DOCUMENT-IDENTIFIER: US 6544505 B2

TITLE: Interferon-epsilon

DATE-ISSUED: April 8, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Conklin; Darrell C.	Seattle	WA		
Grant; Francis J.	Seattle	WA		
Rixon; Mark W.	Issaquah	WA		
Kindsvogel; Wayne	Seattle	WA		

US-CL-CURRENT: 424/85.4; 424/185.1, 435/69.51, 530/350, 530/351

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

☐ 10. Document ID: US 6541623 B1

L10: Entry 10 of 119 File: USPT Apr 1, 2003

US-PAT-NO: 6541623
DOCUMENT-IDENTIFIER: US 6541623 B1

TITLE: Interleukin--1 receptor antagonist and uses thereof

DATE-ISSUED: April 1, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ford; John	San Mateo	CA		
Ho; Alice Suk-Yue	Union City	CA		
Pace; Ann	Scotts Valley	CA		

US-CL-CURRENT: 536/24.3; 435/287.2, 435/288.3, 435/288.4, 536/23.1

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

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Terms	Documents
l6 and L9	119

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Search Results - Record(s) 21 through 30 of 119 returned.

☐ 21. Document ID: US 6495128 B1

L10: Entry 21 of 119 File: USPT Dec 17, 2002

US-PAT-NO: 6495128
DOCUMENT-IDENTIFIER: US 6495128 B1

TITLE: Human chemokine .beta.-7 deletion and substitution proteins

DATE-ISSUED: December 17, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Salcedo; Theodora W.	Gaithersburg	MD		
Patel; Vikram P.	Germantown	MD		
Nibbs; Robert John Benjamin	Glasgow			GB
Graham; Gerard John	Glasgow			GB

US-CL-CURRENT: 424/85.1; 435/254.11, 435/254.3, 435/320.1, 435/325, 435/471, 435/69.5, 435/69.7, 435/71.1, 435/71.2, 530/324, 536/23.5

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments KWIC | Draw Desc | Image

☐ 22. Document ID: US 6482612 B1

L10: Entry 22 of 119 File: USPT Nov 19, 2002

US-PAT-NO: 6482612
DOCUMENT-IDENTIFIER: US 6482612 B1

TITLE: Adipocyte-specific protein homologs

DATE-ISSUED: November 19, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Sheppard; Paul O.	Redmond	WA		
Humes; Jacqueline M.	Seattle	WA		

US-CL-CURRENT: 435/69.1; 435/252.3, 435/320.1, 435/6, 435/7.2, 435/7.21, 436/501, 514/2, 530/350, 536/23.5

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments KWIC | Draw Desc | Image

☐ 23. Document ID: US 6476209 B1

L10: Entry 23 of 119 File: USPT Nov 5, 2002

US-PAT-NO: 6476209
DOCUMENT-IDENTIFIER: US 6476209 B1

TITLE: Polynucleotides, materials incorporating them, and methods for using them

DATE-ISSUED: November 5, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Glenn; Matthew	Auckland			NZ
Lubbers; Mark W.	Palmerston North			NZ
Dekker; James	Palmerston North			NZ

US-CL-CURRENT: 536/23.1; 435/6, 435/91.1, 530/200, 536/22.1

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

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☐ 24. Document ID: US 6476195 B1

L10: Entry 24 of 119 File: USPT Nov 5, 2002

US-PAT-NO: 6476195
DOCUMENT-IDENTIFIER: US 6476195 B1

TITLE: Secreted protein HNFGF20

DATE-ISSUED: November 5, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Komatsoulis; George	Silver Spring	MD		
Rosen; Craig A.	Laytonsville	MD		
Ruben; Steven M.	Olney	MD		
Duan; Roxanne D.	Bethesda	MD		
Moore; Paul A.	Germantown	MD		
Shi; Yanggu	Gaithersburg	MD		
LaFleur; David W.	Washington	DC		
Wei; Ying-Fei	Berkeley	CA		
Ni; Jian	Rockville	MD		
Florence; Kimberly A.	Rockville	MD		
Young; Paul	Gaithersburg	MD		
Brewer; Laurie A.	St. Paul	MN		
Soppet; Daniel R.	Centreville	VA		
Endress; Gregory A.	Potomac	MD		
Ebner; Reinhard	Gaithersburg	MD		
Olsen; Henrik	Gaithersburg	MD		
Mucenski; Michael	Cincinnati	OH		

US-CL-CURRENT: 530/350; 435/6, 435/7.1, 536/23.1

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

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